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FILE 'REGISTRY' ENTERED ON 22 AUG 2006

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FILE 'LREGISTRY' ENTERED ON 22 AUG 2006

L1 STR

FILE 'REGISTRY' ENTERED ON 22 AUG 2006

L2 19 S L1

L3 SCR 2043

L4 8 S L1 AND L3

L5 304 S L1 AND L3 FUL

SAV L5 GOO938/A

FILE 'HCA' ENTERED ON 22 AUG 2006

L6 126 S L5

L7 116286 S (CHARG? OR HOLE#) (2A) (TRANSPORT? OR TRANSFER? OR MIGRAT

L8 3 S L6 AND L7

FILE 'LCA' ENTERED ON 22 AUG 2006

L9 34 S (CHARG? OR HOLE#) (2A) MOBIL?

L10 140 S ELECTROPHOTO? OR ELECTRO (2A) PHOTO?

L11 183 S PHOTOCOND? OR PHOTO (2A) (COND# OR CONDUCT?)

L12 101 S (IONIZ? OR IONIS?) (2A) POTENTIAL?

FILE 'HCA' ENTERED ON 22 AUG 2006

L13 3 S L6 AND (L9 OR L10 OR L11 OR L12)

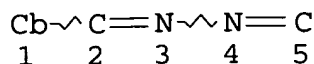
L14 3 S L8 OR L13

L15 123 S L6 NOT L14

FILE 'REGISTRY' ENTERED ON 22 AUG 2006

=> D L5 QUE STAT

L1 STR



## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 1

DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 5

## STEREO ATTRIBUTES: NONE

L3 SCR 2043

L5 304 SEA FILE=REGISTRY SSS FUL L1 AND L3

100.0% PROCESSED 2801 ITERATIONS

304 ANSWERS

SEARCH TIME: 00.00.01

=&gt; FILE HCA

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=&gt; D L14 1-3 CBIB ABS HITSTR HITIND

L14 ANSWER 1 OF 3 HCA COPYRIGHT 2006 ACS on STN

145:17705 Novel hydrazone and azine based **hole**

**transport** materials. Tokarski, Zbig; Moudry, Ron; Jubran, Nusrallah; Getautis, Vytautas; Jankauskas, Vygintas; Daskeviciene, Maryte; Montrimas, Edmundas (Digital Printing Solutions Laboratory, Samsung Information Systems America, Woodbury, MN, USA). IS&T's NIP20: International Conference on Digital Printing Technologies, Final Program and Proceedings, Salt Lake City, UT, United States,

Oct. 31-Nov. 5, 2004, 547-551. Society for Imaging Science and Technology: Springfield, Va. ISBN: 0-89208-253-4 (English) 2004. CODEN: 69HEBH.

AB Thirteen novel **hole transport** materials were prepd. in our labs either as polymeric structures (Compds. (1) - (7)) or as dimeric structures (Compds. (8)-(13)) and several were evaluated for **electrophotog.** These **hole transport** materials contain either hydrazone or azine moieties as part of the **electrophotog.** functional chromophore. The chem. structure of these compds. was confirmed by proton NMR, IR and UV spectroscopy. The **ionization potential** and **hole mobility** (detd. via a xerog. time of flight method) are reported for some of these compds. The presence of hydroxyl groups on some of these materials improves adhesion and compatibility with traditional polycarbonate (PC) and polyvinylbutyral (PVB) binder materials. In addn., these dimeric or polymeric hole TM can be chem. cross-linked in the **photo-conductive** layer, for example, by reaction of the hydroxyl groups with polyisocyanates, to increase the layer stability to bending, stretching and abrasion, as well as the effects of abrasion. The synthesized TM and compns. with binder exhibit good **hole transporting** properties and high mobility making them useful for prepn. of high sensitivity **electro-photog. photoconductors.**

IT 888031-85-4P

(prepn. of novel hydrazone and azine based **hole transport** materials)

RN 888031-85-4 HCA

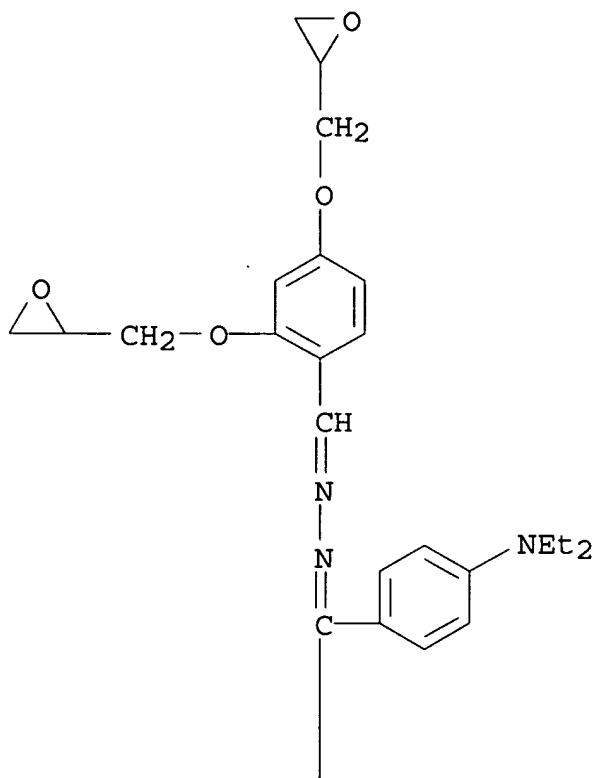
CN Benzaldehyde, 2,4-bis(oxiranylmethoxy)-, [bis[4-(diethylamino)phenyl]methylene]hydrazone, polymer with 4,4'-thiobis[benzenethiol] (9CI) (CA INDEX NAME)

CM 1

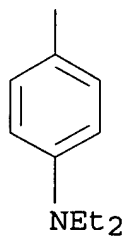
CRN 868162-51-0

CMF C34 H42 N4 O4

PAGE 1-A



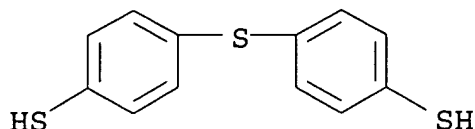
PAGE 2-A



CM 2

CRN 19362-77-7

CMF C12 H10 S3



CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 22

ST prepn novel hydrazone azine **hole transport**  
material **electrophotog**

IT **Electrophotography**

**Hole mobility**

**Hole transport**

**Ionization potential**

**Photoconductivity**

(prepn. of novel hydrazone and azine based **hole transport** materials)

IT Polycarbonates, uses  
Polyvinyl butyrals

(prepn. of novel hydrazone and azine based **hole transport** materials)

IT	848657-51-2P	848657-52-3P	848668-03-1P	848668-04-2P
	848761-65-9P	848761-66-0P	863396-31-0P	863396-32-1P
	863396-33-2P	863396-34-3P	888031-82-1P	888031-84-3P
	<b>888031-85-4P</b>			

(prepn. of novel hydrazone and azine based **hole transport** materials)

IT	86-74-8, Carbazole	90-93-7	618-40-6	4101-68-2,
	1,10-Dibromodecane	7071-83-2	19362-77-7,	4,4'-
	Thiobisbenzenethiol	888031-88-7		

(prepn. of novel hydrazone and azine based **hole transport** materials)

IT	60834-42-6P	169834-33-7P	888031-86-5P
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(prepn. of novel hydrazone and azine based **hole transport** materials)

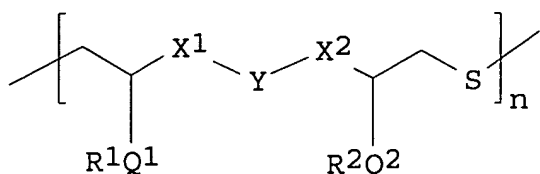
L14 ANSWER 2 OF 3 HCA COPYRIGHT 2006 ACS on STN

144:117731 Polymeric **charge transport** materials

having repeating units comprising an aromatic group and a -s- linkage. Jubran, Nusrallah; Tokarski, Zbigniew; Gaidelis, Valentas;

Getautis, Vytautas; Malinauskas, Tadas; Montrimas, Edmundas; Law, Kam W. (USA). U.S. Pat. Appl. Publ. US 2006003241 A1 20060105, 29 pp. (English). CODEN: USXXCO. APPLICATION: US 2004-883453 20040701.

GI



I

AB Improved organo photoreceptor comprises an elec. conductive substrate and a **photoconductive** element on the elec. conductive substrate, the **photoconductive** element comprising: (a) a polymeric **charge transport** material having the formula I ( $n = 1-100,000$  with an av. value of greater than one;  $Y = \text{arom. group}$ ;  $X1$  and  $X2 = \text{a bond or a linking group}$ ;  $Q1$  and  $Q2 = O, S, \text{ or } NR$ ; and  $R, R1, \text{ and } R2 = H, \text{ alkyl group, alkenyl group, alkynyl group, acyl group, heterocyclic group, arom. group}$ ); and (b) a charge generating compd. Corresponding **electrophotog.** apparatuses, imaging methods, and methods of prepg. the polymeric **charge transport** material are described.

IT 872552-35-7P

(prepn. of polymeric **charge transport**  
materials for **electrophotog** photoreceptors)

RN 872552-35-7 HCA

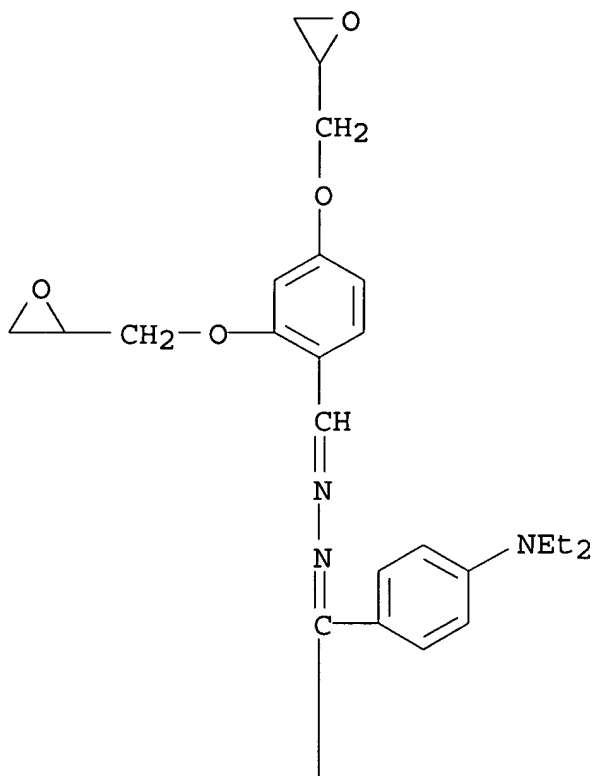
CN Ethanethioamide, polymer with 2,4-bis(oxiranylmethoxy)benzaldehyde [bis[4-(diethylamino)phenyl]methylene]hydrazone (9CI) (CA INDEX NAME)

CM 1

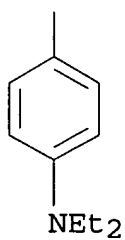
CRN 868162-51-0

CMF C34 H42 N4 O4

PAGE 1-A



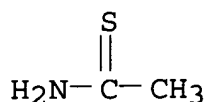
PAGE 2-A



CM 2

CRN 62-55-5

CMF C2 H5 N S



INCL 430058700; 430096000

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

ST **electrophotog** photoreceptor polymeric **charge transport** material

IT **Electrophotographic photoconductors**  
(photoreceptors)  
(**electrophotog** photoreceptors polymeric **charge transport** materials)

IT 122010-64-4P 683273-05-4P 741694-52-0P 857049-30-0P  
857058-32-3P 857058-33-4P 867379-59-7P 868162-51-0P

(prepn. of polymeric **charge transport**  
materials for **electrophotog** photoreceptors)

IT 872552-29-9P 872552-31-3P  
(prepn. of polymeric **charge transport**  
materials for **electrophotog** photoreceptors)

IT 68-12-2, Dimethylformamide, reactions 80-07-9,  
4,4'-Dichlorodiphenyl sulfone 86-28-2, 9-Ethylcarbazole 90-93-7,  
Bis(4,4'-diethylamino)benzophenone 95-01-2, 2,4-  
Dihydroxybenzaldehyde 100-63-0, Phenylhydrazine 106-89-8,  
Epichlorohydrin, reactions 603-34-9, Triphenylamine 1762-95-4,  
Ammonium thiocyanate 4181-05-9, 4-(Diphenylamino)benzaldehyde  
7803-57-8 52131-82-5, 9-(2,3-Epoxypropyl)carbazole

(prepn. of polymeric **charge transport**  
materials for **electrophotog** photoreceptors)

IT 14052-65-4P, 4,4'-Dihydrazinodiphenyl sulfone 53566-95-3P  
70207-46-4P 95640-42-9P 625077-91-0P 741694-54-2P  
857058-42-5P

(prepn. of polymeric **charge transport**  
materials for **electrophotog** photoreceptors)

IT 872552-33-5P 872552-34-6P **872552-35-7P** 872552-36-8P  
(prepn. of polymeric **charge transport**  
materials for **electrophotog** photoreceptors)

L14 ANSWER 3 OF 3 HCA COPYRIGHT 2006 ACS on STN  
143:376393 Poly(azine)-based **charge transport**



materials for organic **electrophotographic** photoreceptors.  
Tokarski, Zbigniew; Jubran, Nusrallah; Getautis, Vytautas;  
Jankauskas, Vygintas; Malinauskas, Tadas; Montrimas, Edmundas (USA).

U.S. Pat. Appl. Publ. US 2005221211 A1 20051006, 17 pp.  
(English). CODEN: USXXCO. APPLICATION: US 2004-814938 20040331.

AB An improved org. photoreceptor comprises an elec. conductive  
substrate and a **photoconductive** element thereon with the  
**photoconductive** element comprising: a **charge-**  
**transport** material having the formula  
[Z1Ar(CR3:NN:CR1R2)Z2]<sub>n</sub> where Z1 and Z2 are, each independently, a  
linking group; Ar comprises an arom. group; R1, R2, and R3 comprise,  
each independently, H, an alkyl group, an alkenyl group, an alkynyl  
group, an arom. group, or a heterocyclic group; and n is a  
distribution of integers between 1 and 100,000 with an av. value of  
greater than one; and a charge-generating compd. An  
**electrophotog.** photoreceptor contg. the above-mentioned  
**charge-transport** material shows good electrostatic  
properties and decreased extn. of the **charge-**  
**transport** material from the photoreceptor by liq. carriers.

IT **866354-02-1P**

(poly(azine)-based **charge-transport** material  
for org. **electrophotog.** photoreceptors)

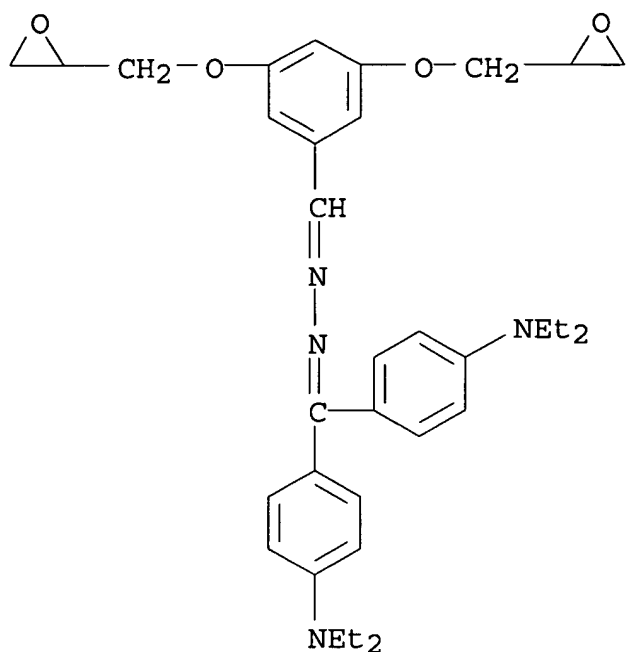
RN 866354-02-1 HCA

CN Benzenethiol, 4,4'-thiobis-, polymer with 4,4'-[[[3,5-  
bis(oxiranylmethoxy)phenyl]methylene]hydrazono]methylene]bis[N,N-  
diethylbenzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 866354-01-0

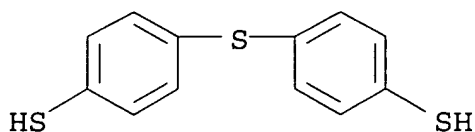
CMF C34 H42 N4 O4



CM 2

CRN 19362-77-7

CMF C12 H10 S3



IC ICM G03G005-06

INCL 430070000; X43-0 7.4; X43-012.6

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST polyazine **charge transport** material  
**electrophotog** photoreceptorIT **Electrophotographic photoconductors**

(photoreceptors)

(org.; poly(azine)-based **charge-transport**material for org. **electrophotog.** photoreceptors)

IT Polyazomethines  
(polyazines; poly(azine)-based **charge-transport**  
material for org. **electrophotog.** photoreceptors)

IT 122010-64-4P 866354-01-0P 866354-03-2P  
(poly(azine)-based **charge-transport** material  
for org. **electrophotog.** photoreceptors)

IT 90-93-7, 4,4'-Bis(diethylamino)benzophenone 95-01-2,  
2,4-Dihydroxybenzaldehyde 106-89-8, Epichlorohydrin, reactions  
(poly(azine)-based **charge-transport** material  
for org. **electrophotog.** photoreceptors)

IT 866354-02-1P  
(poly(azine)-based **charge-transport** material  
for org. **electrophotog.** photoreceptors)

=> D L15 1-123 TI

L15 ANSWER 1 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Ion conductive polymer electrolyte membrane for fuel cells and  
production method for the same

L15 ANSWER 2 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Aromatic polyazines by a copper-amine catalyzed oxidative  
polymerization reaction

L15 ANSWER 3 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI New polymers with poly(p-phenylene-azomethine) structures

L15 ANSWER 4 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis and characterization of segmented block copolymers based  
on hydroxyl-terminated liquid natural rubber and  
 $\alpha,\omega$ -diisocyanato telechelics

L15 ANSWER 5 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Ketazine unit-containing compounds for oligomers and polymers

L15 ANSWER 6 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Liquid crystalline thermosets from dimeric LC epoxy resins cured  
with primary and tertiary amines

L15 ANSWER 7 OF 123 HCA COPYRIGHT 2006 ACS on STN

- TI New dimeric LC-epoxyimine monomers with oxyethylene central spacers.  
Crosslinking study
- L15 ANSWER 8 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Synthesis and characterization of new oxovanadium(IV) and  
dioxouranium(VI) chelates of ONNO donor polymeric schiff bases (PSB)
- L15 ANSWER 9 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Preparation and properties of UF membrane containing a kind of  
liquid crystalline polymers
- L15 ANSWER 10 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Polymer supported N,N'-bis(salicylidene) hydrazine Co(II) Schiff  
base complex and its catalytic activity
- L15 ANSWER 11 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Effect of liquid crystalline ionomer on the thermal behavior and  
tensile strengths of PA1010/PP blends
- L15 ANSWER 12 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Compatibilization by main-chain thermotropic liquid crystalline  
ionomer of blends polybutylene terephthalate/polypropylene
- L15 ANSWER 13 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Thermotropic liquid crystalline epoxy resin and manufacture of the  
resin
- L15 ANSWER 14 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Epoxy carboxylates, photopolymer compositions using them, and their  
cured products useful for printed circuit boards
- L15 ANSWER 15 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Purification of liquid crystal, purified liquid crystal, its  
composition, and display device using it
- L15 ANSWER 16 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Preparation and properties of a series of thermotropic/lyotropic  
main-chain liquid crystalline polymers
- L15 ANSWER 17 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Preparation of oriented polymer layer for fabrication of liquid  
crystal electrooptical cells

- L15 ANSWER 18 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Effect of liquid crystalline polymer on the crystallization behavior and tensile strengths of PA1010/PP blends
- L15 ANSWER 19 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Poly(Schiff base)s containing 1,1'-binaphthyl moieties: synthesis and characterization
- L15 ANSWER 20 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Study on a series of main-chain liquid-crystalline ionomers containing sulfonate groups
- L15 ANSWER 21 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Fully conjugated and soluble polyazomethines containing 1,1'-binaphthyl groups
- L15 ANSWER 22 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Hyperbranched polymers with a degree of branching of 100%
- L15 ANSWER 23 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis and characterization of polyphosphonates having azomethine linkages
- L15 ANSWER 24 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Preparation and polymerization of benzaldehyde formaldehyde azine (1-phenyl-2,3-diaza-1,3-butadiene)
- L15 ANSWER 25 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI The effect of prepolymer composition of amino-hardened liquid crystalline epoxy resins on physical properties of cured thermoset
- L15 ANSWER 26 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI New parabanate products by 1,3-dipolar cycloaddition reaction ("criss-cross" cycloaddition)
- L15 ANSWER 27 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Molecular dynamics of main-chain liquid crystalline polymers
- L15 ANSWER 28 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI A novel approach to the tailoring of polymers for advanced composites and optical applications, involving the synthesis of

liquid crystalline epoxy resins

L15 ANSWER 29 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI An approach to hyperbranched polymers with a branching degree of 100%

L15 ANSWER 30 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI An approach to hyperbranched polymers with a degree of branching of 100%

L15 ANSWER 31 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI Transparent contact lenses with radial refractive index gradient and process for its manufacture

L15 ANSWER 32 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI Syntheses and thermoanalytical studies of some Schiff base polymers derived from 5,5'-methylenebis(2-hydroxyacetophenone)

L15 ANSWER 33 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI Thermoplastic elastomers by criss-cross cycloaddition polymerization

L15 ANSWER 34 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI Molecular dynamics of a main-chain liquid crystalline polyester below the crystalline to nematic phase transition

L15 ANSWER 35 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI Kinetic and mechanistic aspects of copper(II) coordination to bis-N,N'-(salicylidene)-1,2-diaminoethane-based hydrogel polymer membranes, and the permeation of cations through them

L15 ANSWER 36 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI Structural, thermal and electrical studies on manganese-, iron-, cobalt-, nickel- and copper(II) polychelates

L15 ANSWER 37 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI Polymers by criss-cross-cycloaddition. Part 7. Segmented block copolymers

L15 ANSWER 38 OF 123 HCA COPYRIGHT 2006 ACS on STN

TI Highly dipole-aligned molecular crystalline materials for nonlinear optics

- L15 ANSWER 39 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI UV-sensitive polyarylates as photolithographic emulsions
- L15 ANSWER 40 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Polymeric Schiff bases bearing furan moieties. 2. Polyazines and polyazomethines
- L15 ANSWER 41 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI On the formation of liquid crystalline texture in epoxy resins
- L15 ANSWER 42 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Molecular orientation and mechanical properties of polymer blends of PBT and a liquid crystalline polyester
- L15 ANSWER 43 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Characterization of a main-chain semiflexible liquid crystalline polymer: degree of orientational order
- L15 ANSWER 44 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Liquid crystalline epoxy thermosets
- L15 ANSWER 45 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis of poly(enaryloxynitriles) containing Schiff bases and their thermal properties
- L15 ANSWER 46 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Preparation and Properties of Poly(enaryloxy nitriles) Containing Schiff Bases
- L15 ANSWER 47 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Water sorption in a novel liquid crystalline epoxy resin
- L15 ANSWER 48 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Semiconducting studies of some chelate polymers
- L15 ANSWER 49 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Poly(aryl ether-azines)
- L15 ANSWER 50 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Studies on Bismaleimides and Related Materials.4.Synthesis and Characterization of New Bismaleimides Based on Terphenyl, Tetraphenylketazine, and Bisphenol A: "Reactive Building Blocks" for

## Bismaleimides

- L15 ANSWER 51 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Liquid-crystalline polyethers and copolyethers of  
4-hydroxyacetophenone azine with flexible methylene spacers
- L15 ANSWER 52 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis of poly(aryl ether azines)
- L15 ANSWER 53 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Liquid-crystalline epoxy resins: a glycidyl-terminated benzaldehyde  
azine cured in the nematic phase
- L15 ANSWER 54 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Polymerization by [3+2]-cycloaddition. 5. Telechelics with  
isocyanate end-groups
- L15 ANSWER 55 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Phase behavior and orientational order of a main-chain nematic  
polyester: a combined SANS and NMR study
- L15 ANSWER 56 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Dielectric and EPR measurements of a main-chain liquid crystalline  
polyazine. Advanced tools to study thermal behavior
- L15 ANSWER 57 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Liquid-crystalline polyethers and copolyethers of  
4-hydroxyacetophenone azine with a homologous series of flexible  
methylene spacers
- L15 ANSWER 58 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI A small-angle neutron scattering study of a semiflexible main-chain  
liquid crystalline copolyester
- L15 ANSWER 59 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Liquid-crystalline ionomers. II. Main chain liquid crystalline  
polymers with terminal sulfonate groups
- L15 ANSWER 60 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI The synthesis of a mesogenic poly(azine ether) by polyetherification  
via cesium diphenoxides and  $\alpha,\omega$ -dibromoalkanes



- L15 ANSWER 61 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Structure and substitution effects on the thermotropicity of some polyesters and model compounds
- L15 ANSWER 62 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Liquid-crystalline ionomers. I. Main-chain liquid-crystalline polymer containing pendant sulfonate groups
- L15 ANSWER 63 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis and characterization of a thermotropic polyalkanoate of 4,4'-dihydroxy- $\alpha,\alpha'$ -dimethylbenzalazine
- L15 ANSWER 64 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Prevention of static mark generation in silver halide photographic material without causing sweating
- L15 ANSWER 65 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Prevention of static mark generation in silver halide photography without causing sweating
- L15 ANSWER 66 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Thermal degradation studies of some new coordination polymers
- L15 ANSWER 67 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis and properties of a thermotropic copolyester based on 4-hydroxyacetophenone azine
- L15 ANSWER 68 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Ferroelectric liquid-crystal compositions, optical devices using them, and preparation of the devices
- L15 ANSWER 69 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI High-performance polymers from lignin degradation products
- L15 ANSWER 70 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Manufacture of solvent-resistant UV-absorbing polymers
- L15 ANSWER 71 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Syntheses of thermotropic poly(azine ethers) derived from 2,4-hydroxybenzaldehyde and 2,4-dihydroxyacetophenone
- L15 ANSWER 72 OF 123 HCA COPYRIGHT 2006 ACS on STN

- TI Silver halide photographic photosensitive materials with improved antistatic and antisweating properties.
- L15 ANSWER 73 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI New mesogenic polyethers derived from benzalazines
- L15 ANSWER 74 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Conformational energy calculations on the crystalline state of mesogenic polyesters
- L15 ANSWER 75 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis and polymerization of unsaturated benzaldazines
- L15 ANSWER 76 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Novel reinforced polymers based on blends of polystyrene and a thermotropic liquid crystalline polymer
- L15 ANSWER 77 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Possible chain conformations in the crystalline state of a series of mesogenic polymers
- L15 ANSWER 78 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Dimensional stability of polystyrene/polymeric liquid crystal blends
- L15 ANSWER 79 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Mesophasic properties of low molecular weight analogues of nematogenic polycarbonates
- L15 ANSWER 80 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI The properties and phase relationships of blends of liquid crystal polymers and thermoplastic polymers
- L15 ANSWER 81 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Isothermal crystallization of polybenzalazine derivatives synthesized from vanillin
- L15 ANSWER 82 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis and characterization of polymers derived from 2,5-dimethoxyterephthaldehyde and 2,5-dimethoxyterephthalic acid
- L15 ANSWER 83 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis and electrical conductivity of polyazine

- L15 ANSWER 84 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Configurational aspects of the odd-even effect in thermotropic liquid crystalline polyesters
- L15 ANSWER 85 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Temperature-dependent smectic-like structure observed in linear mesogenic polymers
- L15 ANSWER 86 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Mesophasic properties of linear copolymers. 3. Nematogenic copolyesters containing nonmesogenic rigid groups
- L15 ANSWER 87 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Polyazines as new chlorination catalysts
- L15 ANSWER 88 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Synthesis and thermal analysis of polyethers and polyesters having methoxybenzalazine units
- L15 ANSWER 89 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Liquid crystal behavior of linear copolymers. I
- L15 ANSWER 90 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Liquid crystal behavior of linear copolymers. II
- L15 ANSWER 91 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Odd-even effects in polymeric liquid crystals
- L15 ANSWER 92 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI High-molecular-weight products of the condensation polymerization of 4,4'-methylenedibenzaldehyde with aliphatic diamines and polyfunctional isocyanates
- L15 ANSWER 93 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Copolymerizable, UV light absorber 4-alkoxy-2'-allyloxybenzazines
- L15 ANSWER 94 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Studies on synthetic polymers and liquid crystals related to lignin and carbohydrates
- L15 ANSWER 95 OF 123 HCA COPYRIGHT 2006 ACS on STN

- TI Crystallization of polymers in the presence of electric fields
- L15 ANSWER 96 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Reaction of polyazines with triiron dodecacarbonyl
- L15 ANSWER 97 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Copolymerizable, ultraviolet light absorber 4-alkoxy-2'-acryloxy benzazines
- L15 ANSWER 98 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Synthesis and study of organo germanium  $\alpha$ -acetylenic compounds with difunctional oxygen-containing groups
- L15 ANSWER 99 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Polyesters having good mechanical strength
- L15 ANSWER 100 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Mesophasic behavior of some polycarbonates of 4,4'-dihydroxy- $\alpha,\alpha'$ -dimethylbenzalazine
- L15 ANSWER 101 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Mesophasic polymers. Copolyalkanoates of 4,4'-dihydroxy- $\alpha,\alpha'$ -dimethylbenzalazine
- L15 ANSWER 102 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI X-ray diffraction from polymers with mesomorphic order
- L15 ANSWER 103 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Polycondensation of  $\alpha$ -acetylenic diketones and silicon-containing diacetylenic  $\gamma$ -diketones with  $\pi$ -arylene diamines and hydrazine
- L15 ANSWER 104 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Synthesis and study of some silicon-containing poly-Schiff-bases and polyazines based on silicon-containing diacetylenic  $\gamma$ -diketones
- L15 ANSWER 105 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Syntheses and properties of some new polymeric Schiff bases
- L15 ANSWER 106 OF 123 HCA COPYRIGHT 2006 ACS on STN
- TI Synthesis and study of some poly-Schiff bases and polyazines based

on acetylene diketones

- L15 ANSWER 107 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Structure and thermal expansion of some polymers with mesomorphic ordering
- L15 ANSWER 108 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Heat-stable polyimide resin from bis(imide), polyamine, and alazine
- L15 ANSWER 109 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Mesophasic structures in polymers. Mesophases of some poly(alkanoates) of p,p'-dihydroxy- $\alpha,\alpha'$ -dimethylbenzalazine
- L15 ANSWER 110 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Ultraviolet and thermally stable polymer compositions
- L15 ANSWER 111 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Ultraviolet and thermally-stable polymer compositions
- L15 ANSWER 112 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Silicon-containing polyazines
- L15 ANSWER 113 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Poly(diphenylsiloxo)arylazines. I. Synthesis and characterization
- L15 ANSWER 114 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Preparation and properties of monomeric and polymeric Schiff bases derived from salicylaldehyde and 2,5-dihydroxyterephthalaldehyde. II. Electrical conductivity
- L15 ANSWER 115 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Heat-resistant thermoplastic polyimides
- L15 ANSWER 116 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Thermostable polyimides
- L15 ANSWER 117 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Polyurethanes
- L15 ANSWER 118 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Acid-catalyzed polycondensation of bisdiazalkanes

- L15 ANSWER 119 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Azine polymers
- L15 ANSWER 120 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Acid-catalyzed polycondensation of bisdiazalkanes
- L15 ANSWER 121 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Reaction of titanium(IV) halides with azines
- L15 ANSWER 122 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI Polymeric Schiff Bases. XII. The syntheses and thermal stabilities of polyazines and derived polystilbenes
- L15 ANSWER 123 OF 123 HCA COPYRIGHT 2006 ACS on STN  
TI 5-Formyl-2-(ethylamino)-N-ethyltroponeimine derivatives

=> D L15 1,9,11,17,28,39,72,83,95 CBIB ABS HITSTR HITRN

- L15 ANSWER 1 OF 123 HCA COPYRIGHT 2006 ACS on STN  
144:91112 Ion conductive polymer electrolyte membrane for fuel cells and production method for the same. Shimoyama, Naoyuki; Saitoh, Fumio; Kimura, Toru; Tobita, Masayuki (Polymatech Co., Ltd., Japan). U.S. Pat. Appl. Publ. US 2006004112 A1 20060105, 21 pp. (English). CODEN: USXXCO. APPLICATION: US 2005-173721, 20050701. PRIORITY: JP 2004-198608 20040705.
- AB An electrolyte membrane formed of an ion conductive compn. contains a liq. cryst. polymer having an ionic dissociative group. Mol. chains of the liq. cryst. polymer are oriented in a specific direction. The degree of orientation  $\alpha$  of the liq. cryst. polymer is in a range of 0.45 or more and less than 1, as defined by equation (1) as follows; Degree of orientation  $\alpha = (180 - \Delta B / 180)$  (1), wherein  $\Delta B$  is a full width at half max. of a peak in an X-ray diffraction intensity distribution pattern obtained by measuring an intensity distribution from 0 to 360 degrees in the azimuthal angle direction, at a peak scattering angle, in an X-ray diffraction image of the electrolyte membrane. Ionic cond. in a thickness direction of the membrane is higher than the ionic cond. in a direction parallel to a surface of the membrane. The present invention also provides a method for manufg.

an electrolyte membrane formed of an ion conductive compn.

IT 399030-33-2P

(ion conductive polymer electrolyte membrane and prodn. method  
for the same)

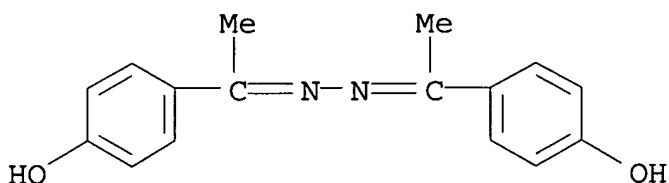
RN 399030-33-2 HCA

CN 1,4-Benzenedicarbonyl dichloride, polymer with decanedioyl  
dichloride and 1-(4-hydroxyphenyl)ethanone [1-(4-  
hydroxyphenyl)ethylidene]hydrazone (9CI) (CA INDEX NAME)

CM 1

CRN 5466-24-0

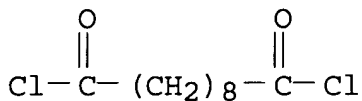
CMF C16 H16 N2 O2



CM 2

CRN 111-19-3

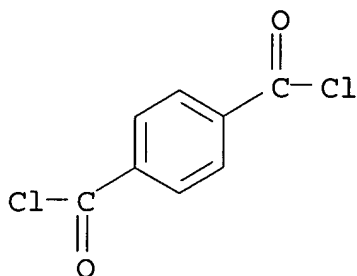
CMF C10 H16 Cl2 O2



CM 3

CRN 100-20-9

CMF C8 H4 Cl2 O2



IT 399030-33-2P

(ion conductive polymer electrolyte membrane and prodn. method for the same)

L15 ANSWER 9 OF 123 HCA COPYRIGHT 2006 ACS on STN

138:288550 Preparation and properties of UF membrane containing a kind of liquid crystalline polymers. Li, Yanxiang; Wang, Hongguang; Zhang, Baoyan; Liu, Zhuojun (Department of Chemistry, Northeastern University, Shenyang, 110006, Peop. Rep. China). Mo Kexue Yu Jishu, 20(5), 27-31 (Chinese) 2000. CODEN: MKYJEF. ISSN: 0254-6140. Publisher: Mo Kexue Yu Jishu Bianjibu.

AB A kind of polysulfone(PS) ultrafiltration(UF) membrane contg. main-chain LCP (liq. crystal polymer) made in our lab. was prepd. at high temp. (80 °), whose retention to BSA is more than 90%. The results show that the retention of LCP/PS UF membrane increases greatly from 60%.apprx.70% to 90% or more, in comparison with the membrane without LCP under the same condition. A series of conditions of prepn., e.g. solvent, the contents of LCP and PS in casting soln., additive, evapn. temp. and time, which probably affecting the properties of LCP/PS UF membrane, were studied.

IT 113007-68-4 113007-81-1

(liq. cryst. polymer; retention of bovine serum albumin in ultrafiltration membrane contg. liq. cryst. polymers)

RN 113007-68-4 HCA

CN Decanedioic acid, polymer with (1E)-1-(4-hydroxyphenyl)ethanone (2E)-[1-(4-hydroxyphenyl)ethylidene]hydrazone (9CI) (CA INDEX NAME)

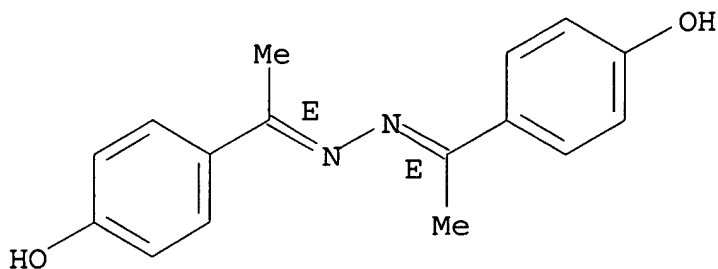
CM 1

CRN 65124-89-2

CMF C16 H16 N2 O2



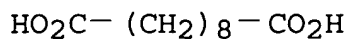
Double bond geometry as shown.



CM 2

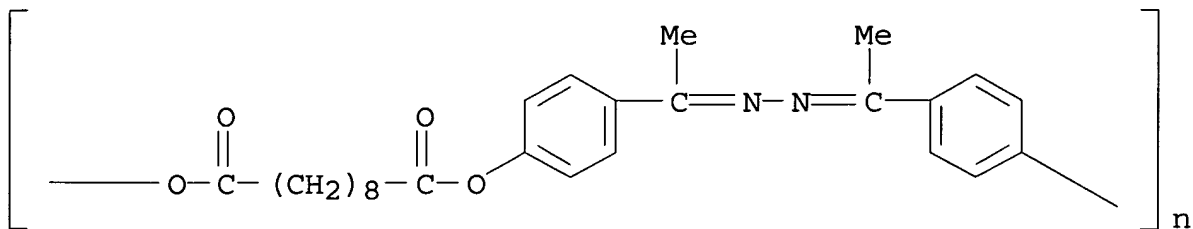
CRN 111-20-6

CMF C10 H18 O4



RN 113007-81-1 HCA

CN Poly[oxy(1,10-dioxo-1,10-decanediyl)oxy-1,4-phenylene-(1E)-ethylidyne-(2E)-azinoethylidyne-1,4-phenylene] (9CI) (CA INDEX NAME)



IT 113007-68-4 113007-81-1

(liq. cryst. polymer; retention of bovine serum albumin in ultrafiltration membrane contg. liq. cryst. polymers)

L15 ANSWER 11 OF 123 HCA COPYRIGHT 2006 ACS on STN

137:326040 Effect of liquid crystalline ionomer on the thermal behavior and tensile strengths of PA1010/PP blends. Zhang, Ai-ling; Zhang, Bao-yan; Feng, Wen-juan; Zhang, De-pin (School of Science, Northeastern University, Shenyang, 110004, Peop. Rep. China).

Dongbei Daxue Xuebao, Ziran Kexueban, 23(2), 199-202 (Chinese) 2002.  
CODEN: DDXKEZ. ISSN: 1005-3026. Publisher: Dongbei Daxue Xuebao  
Bianjibu.

AB Effect of main-chain liq. cryst. ionomer (LCI) on the crystn.  
behavior of the PA1010/polypropylene (PP) blends was investigated by  
DSC, TGA and tensile test. The blends with 0.8% LCI content could  
improve the crystallinity of PA1010/PP blends, and increase the  
crystg. temp. (tC) and the tensile strength of the blends. The  
tensile strength of blends with 0.8% LCI is 22.3 MPa, which is  
higher than 15.6 MPa of pure PA1010. The LCI component is found as  
a compatibilizer to promote the crystallizability of PA1010 and PP,  
it is due to strong intermol. attractive interactions between the  
sulfonate and amide group.

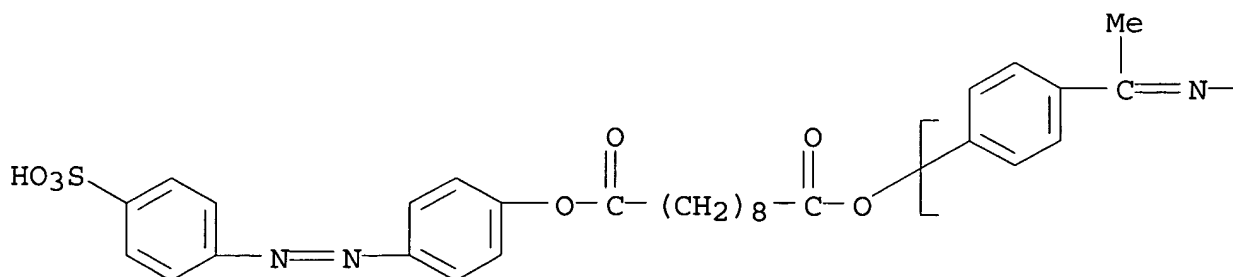
IT 448948-21-8 450407-73-5

(effect of liq. cryst. ionomer on thermal behavior and tensile  
strengths of PA1010/PP blends)

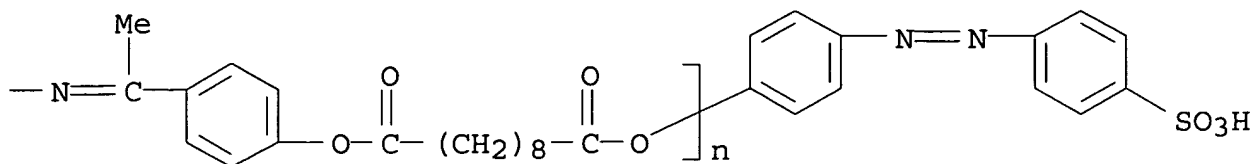
RN 448948-21-8 HCA

CN Poly[oxy(1,10-dioxo-1,10-decanediyl)oxy-1,4-phenylene-(1E)-  
ethylidyne-(2E)-azinoethylidyne-1,4-phenylene],  $\alpha$ -[4-[(1E)-(4-  
sulfophenyl)azo]phenyl]- $\omega$ -[[1,10-dioxo-10-[4-[(1E)-(4-  
sulfophenyl)azo]phenoxy]decyl]oxy]-, disodium salt (9CI) (CA INDEX  
NAME)

PAGE 1-A



PAGE 1-B



RN 450407-73-5 HCA

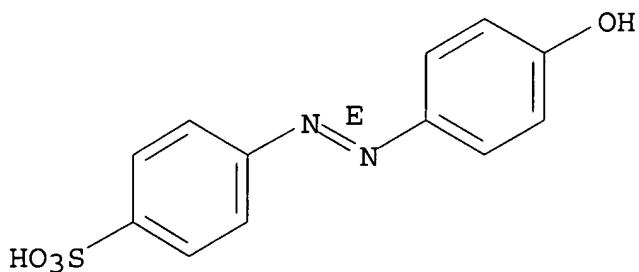
CN Decanedioyl dichloride, polymer with (1E)-1-(4-hydroxyphenyl)ethanone (2E)-[1-(4-hydroxyphenyl)ethylidene]hydrazone, bis[4-[(1E)-(4-sulfohenyl)azol]phenyl] ester, disodium salt (9CI)  
(CA INDEX NAME)

CM 1

CRN 78733-37-6

CMF C12 H10 N2 O4 S

Double bond geometry as shown.



CM 2

CRN 172272-98-9

CMF (C16 H16 N2 O2 . C10 H16 Cl2 O2)x

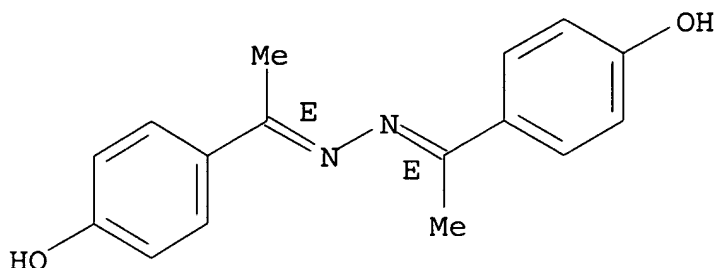
CCI PMS

CM 3

CRN 65124-89-2

CMF C16 H16 N2 O2

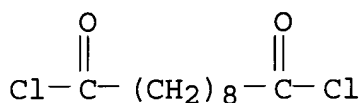
Double bond geometry as shown.



CM 4

CRN 111-19-3

CMF C10 H16 Cl2 O2



IT 448948-21-8 450407-73-5

(effect of liq. cryst. ionomer on thermal behavior and tensile strengths of PA1010/PP blends)

L15 ANSWER 17 OF 123 HCA COPYRIGHT 2006 ACS on STN

136:301859 Preparation of oriented polymer layer for fabrication of liquid crystal electrooptical cells. Amendola, Eugenio; Carfagna, Cosimo; Komitov, Lachezar (Italy). Ital. IT 1298482 B1 20000110, 14 pp. (Italian). CODEN: ITXXBY. APPLICATION: IT 1996-NA30 19960523.

AB An epoxy monomer is reacted with aniline or similar bifunctional compd., e.g., an aliph. dithiol, diamine, diisocyanate or dicarboxylic acid; the product is reacted with methacrylic acid using N,N-dimethylbenzylamine as catalyst, and the resulting prepolymer is cross-linked using heat or UV irradiation to give a liquid crystal resin. The resin is deposited directly on an oxide substrate as a thin film with controlled orientation to obtain liquid crystal cells, e.g., for surface-stabilized ferroelectric liquid crystal displays. The molecular orientation of the liquid crystal cells are characterized optically using a linear optical polarization filter.

The process provides a uniformly oriented surface that is resistant to scratches and contamination by particles and electrostatic charge.

IT 409071-10-9P

(prepn. of oriented polymer layer for fabrication of liq. crystal electrooptical cells)

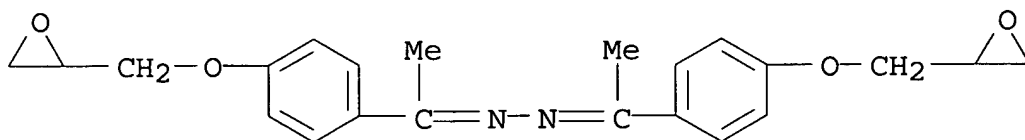
RN 409071-10-9 HCA

CN 2-Propenoic acid, 2-methyl-, polymer with benzenamine and 1-[4-(oxiranylmethoxy)phenyl]ethanone [1-[4-(oxiranylmethoxy)phenyl]ethylidene]hydrazone (9CI) (CA INDEX NAME)

CM 1

CRN 169785-33-5

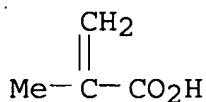
CMF C22 H24 N2 O4



CM 2

CRN 79-41-4

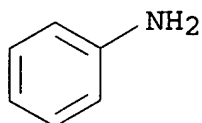
CMF C4 H6 O2



CM 3

CRN 62-53-3

CMF C6 H7 N



IT 409071-10-9P

(prepn. of oriented polymer layer for fabrication of liq. crystal electrooptical cells)

L15 ANSWER 28 OF 123 HCA COPYRIGHT 2006 ACS on STN

131:45514 A novel approach to the tailoring of polymers for advanced composites and optical applications, involving the synthesis of liquid crystalline epoxy resins. Giamberini, Marta; Amendola, Eugenio; Carfagna, Cosimo (Department of Materials and Production Engineering, University of Naples "Federico II", Naples, 80125, Italy). Polymer Engineering and Science, 39(3), 534-542 (English) 1999. CODEN: PYESAZ. ISSN: 0032-3888. Publisher: Society of Plastics Engineers.

AB The authors describe the features of liq. cryst. epoxy resins having both high and low crosslinking densities. These materials seem to be very promising as matrixes in advanced composites and in optical and electro-optical applications because of their peculiar properties. The importance of factors like mol. rigidity, nature of the curing agent, and curing temp. for the development of such properties are analyzed. The authors showed that amines produce thermosets having high Tgs and high fracture toughness. In particular, the enhancement of this last parameter is very promising if a new generation of matrixes is to be sought for manufg. composites. In the case of acids as curing agents, thermosets having lower Tgs and more ordered mesophases can be obtained. In this case, LC elastomers can be prepd. that can find applications in the optical industry as wave-guides or electro-optical devices.

IT 227180-66-7

(optionally glass fiber-reinforced; tailoring of liq. cryst. epoxy resins for advanced composites and optical applications)

RN 227180-66-7 HCA

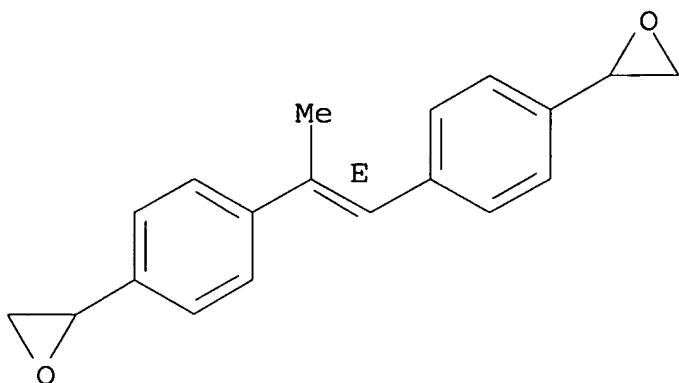
CN Benzaldehyde, 4-amino-, [(2E)-(4-aminophenyl)methylene]hydrazone, [C(E)]-, polymer with 2,2'-[[[(1E)-1-methyl-1,2-ethenediyl]di-4,1-phenylene]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 227180-65-6

CMF C19 H18 O2

Double bond geometry as shown.

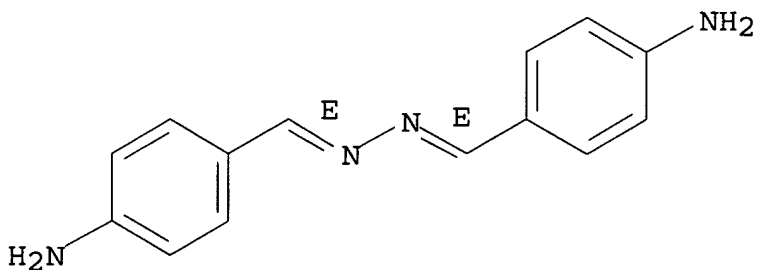


CM 2

CRN 227180-63-4

CMF C14 H14 N4

Double bond geometry as shown.



IT 227180-64-5

(tailoring of liq. cryst. epoxy resins for advanced composites  
and optical applications)

RN 227180-64-5 HCA

CN Benzaldehyde, 4-amino-, [(2E)-(4-aminophenyl)methylene]hydrazone,  
[C(E)]-, polymer with 2,2'-[1,1'-biphenyl]-4,4'-diylbis[oxirane]

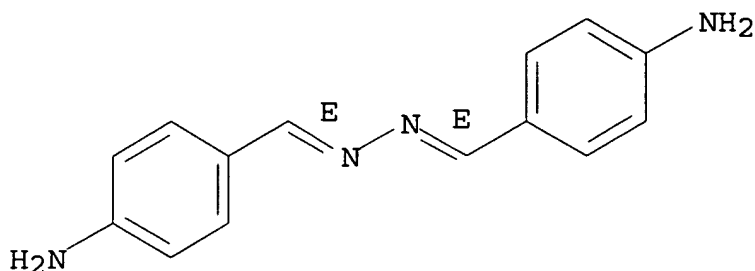
(9CI) (CA INDEX NAME)

CM 1

CRN 227180-63-4

CMF C14 H14 N4

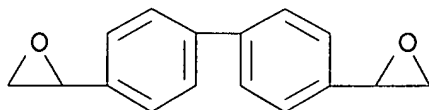
Double bond geometry as shown.



CM 2

CRN 5354-27-8

CMF C16 H14 O2



IT 227180-66-7

(optionally glass fiber-reinforced; tailoring of liq. cryst. epoxy resins for advanced composites and optical applications)

IT 227180-64-5

(tailoring of liq. cryst. epoxy resins for advanced composites and optical applications)

L15 ANSWER 39 OF 123 HCA COPYRIGHT 2006 ACS on STN

124:356052 UV-sensitive polyarylates as photolithographic emulsions.

Noniewicz, Konrad; Brzozowski, Zbigniew K.; Zadrozna, Irmina (Dep. Specialty Polymers, Warsaw Univ. Technology, Warsaw, 00-662, Pol.).

Journal of Applied Polymer Science, 60(7), 1071-82 (English) 1996.

CODEN: JAPNAB. ISSN: 0021-8995. Publisher: Wiley.



AB Several UV-sensitive polyarylates based on bisbenzylideneketones for use as potential photolithog. emulsions were obtained by interfacial polycondensation. The structures of obtained UV-sensitive monomers and polymers were confirmed by IR, <sup>1</sup>H-NMR, and UV spectroscopies. Mech. and dielec. properties of the obtained polyarylates (including dielec. loss factor, dielec. const., vol. and surface resistivity, and dielec. strength) were evaluated. The investigations show that some of the new polymers obtained in this study may find application as photoresists.

IT 176854-10-7P 176854-11-8P

(UV-sensitive polyarylates based on bisbenzylideneketones as photoresists obtained by interfacial polycondensation)

RN 176854-10-7 HCA

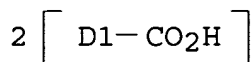
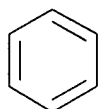
CN Benzenedicarboxylic acid, polymer with 3-ethoxy-4-hydroxybenzaldehyde [(3-ethoxy-4-hydroxyphenyl)methylene]hydrazone and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 29010-86-4

CMF C8 H6 O4

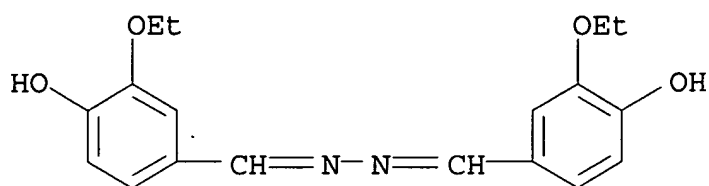
CCI IDS



CM 2

CRN 28076-03-1

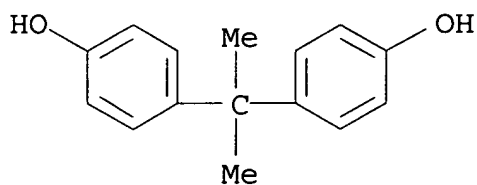
CMF C18 H20 N2 O4



CM 3

CRN 80-05-7

CMF C15 H16 O2



RN 176854-11-8 HCA

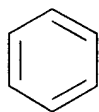
CN Benzenedicarboxylic acid, polymer with 4-hydroxybenzaldehyde [(4-hydroxyphenyl)methylene]hydrazone and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 29010-86-4

CMF C8 H6 O4

CCI IDS

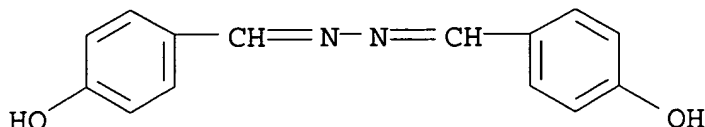


2 [ D1- CO<sub>2</sub>H ]

CM 2

CRN 5466-23-9

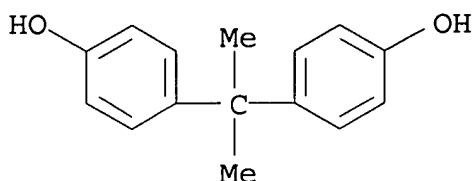
CMF C14 H12 N2 O2



CM 3

CRN 80-05-7

CMF C15 H16 O2



IT 176854-10-7P 176854-11-8P

(UV-sensitive polyarylates based on bisbenzylideneketones as photoresists obtained by interfacial polycondensation)

L15 ANSWER 72 OF 123 HCA COPYRIGHT 2006 ACS on STN

109:219489 Silver halide photographic photosensitive materials with improved antistatic and antisweating properties.. Usagawa, Yasushi; Iwagaki, Masaru (Konica Co., Japan). Jpn. Kokai Tokkyo Koho JP 63056651 A2 19880311 Showa, 20 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1986-200741 19860827.

AB An UV-absorbing compd. residue-contg. polyurethane or polyurea is included in the title photog. material (preferably in its surface protective layer) as an antistatic agent and to prevent sweating. The UV-absorbing compd. residue-contg. polyurethane or polyurea has the repeating structure Q-(-Y-)n(Q = UV-absorbing compd. residue; Y = O, NR; R = H, alkyl, cycloalkyl, Ph; n = 2-4). Isocyanates and an UV-absorbing compd. having OH or NH2 groups may be polyimd. to give

the polyurethane or polyurea.

IT 117392-03-7P

(prepn. and use of, as photog. antistatic and antisweating agent)

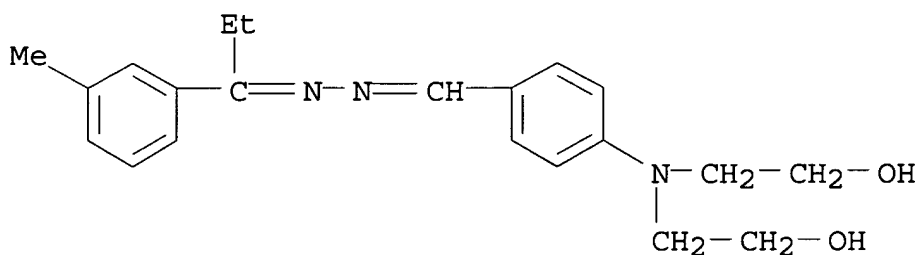
RN 117392-03-7 HCA

CN Benzaldehyde, 4-[bis(2-hydroxyethyl)amino]-, [1-(3-methylphenyl)propylidene]hydrazone, polymer with 1,2-diisocyanatocyclohexane and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 117392-02-6

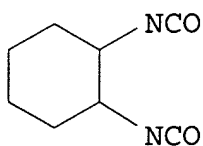
CMF C21 H27 N3 O2



CM 2

CRN 14167-81-8

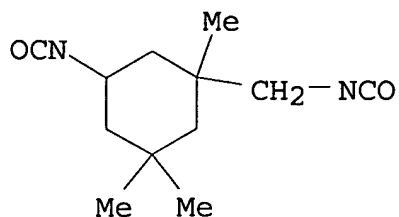
CMF C8 H10 N2 O2



CM 3

CRN 4098-71-9

CMF C12 H18 N2 O2



IT 117392-33-3P 117392-35-5P 117397-28-1P

(prepn. of, as photog. antistatic and antisweating agent)

RN 117392-33-3 HCA

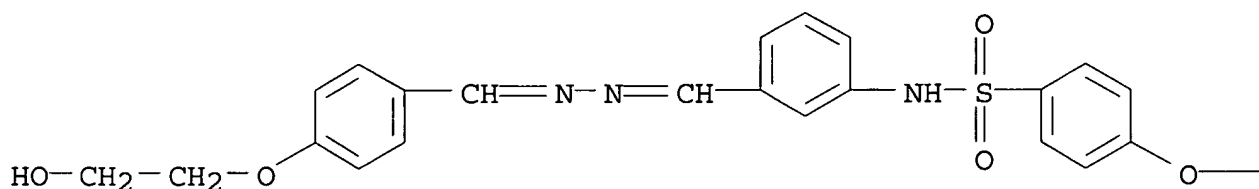
CN Benzenesulfonamide, 4-(2-hydroxyethoxy)-N-[3-[[[4-(2-hydroxyethoxy)phenyl]methylene]hydrazono]methyl]phenyl]-, polymer with 1,5-isocyanatopentane and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

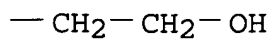
CRN 117392-32-2

CMF C24 H25 N3 O6 S

PAGE 1-A



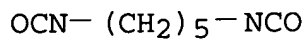
PAGE 1-B



CM 2

CRN 4538-42-5

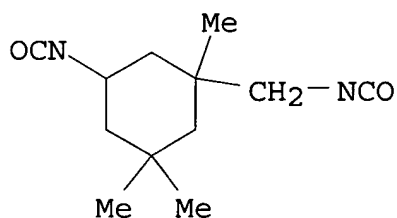
CMF C7 H10 N2 O2



CM 3

CRN 4098-71-9

CMF C12 H18 N2 O2



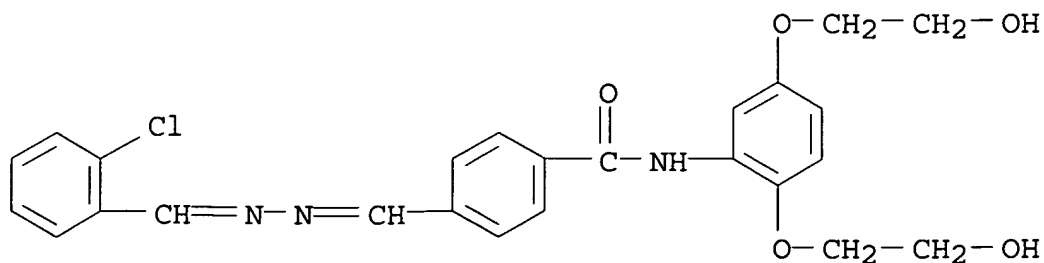
RN 117392-35-5 HCA

CN Benzamide, N-[2,5-bis(2-hydroxyethoxy)phenyl]-4-[[[(2-chlorophenyl)methylene]hydrazono]methyl]-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 117392-34-4

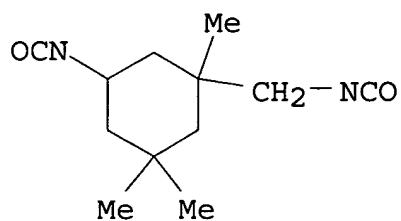
CMF C25 H24 Cl N3 O5



CM 2

CRN 4098-71-9

CMF C12 H18 N2 O2



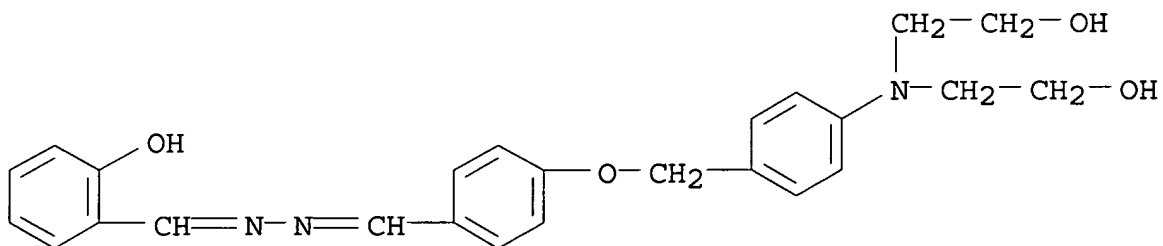
RN 117397-28-1 HCA

CN Benzaldehyde, 4-[[4-[bis(2-hydroxyethyl)amino]phenyl]methoxy]-, [(2-hydroxyphenyl)methylene]hydrazone, polymer with 1,3-bis(isocyanatomethyl)benzene and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 117397-27-0

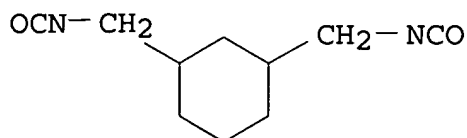
CMF C25 H27 N3 O4



CM 2

CRN 38661-72-2

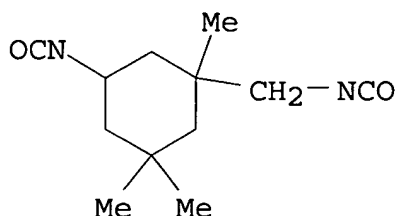
CMF C10 H14 N2 O2



CM 3

CRN 4098-71-9

CMF C12 H18 N2 O2



IT 117392-03-7P

(prepn. and use of, as photog. antistatic and antisweating agent)

IT 117392-33-3P 117392-35-5P 117397-28-1P

(prepn. of, as photog. antistatic and antisweating agent)

L15 ANSWER 83 OF 123 HCA COPYRIGHT 2006 ACS on STN

103:54523 Synthesis and electrical conductivity of polyazine. Lee, Yong Kyun; Chung, Ha Sik (Dep. Chem., Hanyang Univ., Seoul, 133, S. Korea). Polymer (Korea), 9(2), 117-24 (Korean) 1985. CODEN: POLLDG. ISSN: 0379-153X.

AB Elec. cond. polyazines,  $(-CH:N-N:CH-)_n$  (I) [85772-00-5] and  $(:CH-p-C_6H_4-CH:N-N:)_n$  (II) [78407-54-2] were prepd. by condensation reaction of hydrazine hydrate with glyoxal in water, and with terephthaldialdehyde in MeOH, resp. D.p. was studied by varying temp. and concn. of reactants. The presence of polyazine structure in products was identified by a characteristic peak of  $-C:N-$  group in IR spectra at 1620-1640  $cm^{-1}$ . I and II are insol. in 30 kinds of solvents. Elec. conductivities of polyazines measured by a 4-point probe d.c. method were comparable to that of polyacetylene.

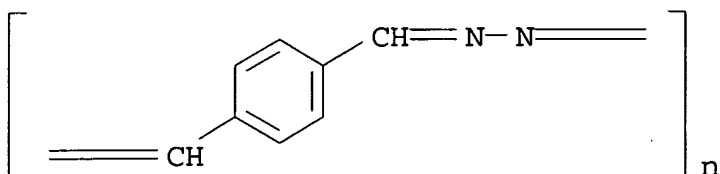
IT 78407-54-2P



(prepn. and elec. cond. of)

RN 78407-54-2 HCA

CN Poly(azinomethyldiyne-1,4-phenylenemethyldiyne) (9CI) (CA INDEX NAME)



IT 78407-54-2P

(prepn. and elec. cond. of)

L15 ANSWER 95 OF 123 HCA COPYRIGHT 2006 ACS on STN

95:98493 Crystallization of polymers in the presence of electric fields. Tynenska, B.; Galeski, A.; Kryszewski, M. (Cent. Mol. Macromol. Stud., Polish Acad. Sci., Lodz, 90-362, Pol.). ~~Polymer Bulletin (Berlin, Germany), 4(3), 171-7 (English) 1981.~~ CODEN: POBUDR. ISSN: 0170-0839.

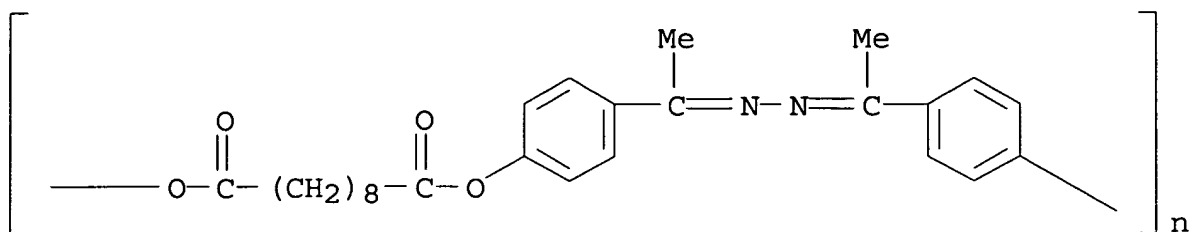
AB The influence of the external const. and alternating elec. fields on the crystn. from melt was studied for poly(ethylene oxide) [25322-68-3] and poly(vinylidene fluoride) [24937-79-9]. No real effect was found. The orientation of crystals due to the external const. elec. field has been established in one of the two conjugated liq. crystal polyesters studied. The external elec. field could only influence the crystn. of species having very large resultant dipole moments.

IT 57085-48-0 78928-64-0

(crystn. of, elec. field effect on)

RN 57085-48-0 HCA

CN Poly[oxy(1,10-dioxo-1,10-decanediyl)oxy-1,4-phenyleneethyldiyneazinoethyldiyne-1,4-phenylene] (9CI) (CA INDEX NAME)



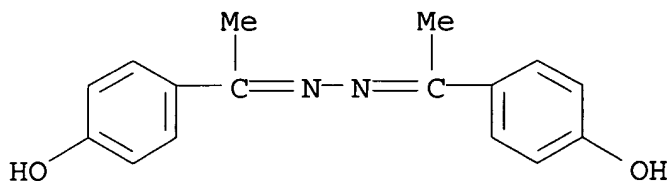
RN 78928-64-0 HCA

CN Decanedioic acid, polymer with 1-(4-hydroxyphenyl)ethanone  
[1-(4-hydroxyphenyl)ethylidene]hydrazone (9CI) (CA INDEX NAME)

CM 1

CRN 5466-24-0

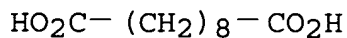
CMF C16 H16 N2 O2



CM 2

CRN 111-20-6

CMF C10 H18 O4



IT 57085-48-0 78928-64-0

(crystn. of, elec. field effect on)